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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,457	06/01/2001	David R. Miller	041581-2002 3014	
36412	7590 06/03/2005		EXAMINER	
DUCKOR SPRADLING METZGER 401 WEST A STREET, SUITE 2400			CORRIELUS, JEAN M	
SAN DIEGO, CA 92101-7915			ART UNIT	PAPER NUMBER
	•		2162	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)			
	09/872,457	MILLER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Jean M Corrielus	2162			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 01 Ju	<u>ıne 2001</u> .				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	☐ This action is FINAL. 2b)☑ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
4)⊠ Claim(s) <u>1-13</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-13</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.				
Application Papers					
9) The specification is objected to by the Examine	r.	•			
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).			
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	)-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:	a bassa bassa sasa ta a ta				
1. Certified copies of the priority documents have been received.					
<ul> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)	<b>∧</b> □	(DTO 440)			
) Motice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Interview Summary (PTO-413)  Paper No(s)/Mail Date					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal P	atent Application (PTO-152)			
Paper No(s)/Mail Date	6)  Other:				

1. This office action is in response to the application filed on June 01, 2001, in which claims

1-13 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement (IDS) filed on November 04, 2004, January 3, 2005

and January 28, 2005 complies with the provisions of M.P.E.P 609. It has been placed in the

application file. The information referred to therein has been considered as to the merits.

Drawings

3. Applicants are required to furnish the formal drawings in response to this office action if

the formal drawings have not been submitted. No new matter may be introduced in the required

drawings. Failure to timely submit a drawing will result in ABANDONMENT of the application.

4. Figures 1 and 2 should be designated by a legend such as -- Prior Art-- because only that

which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37

CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application.

The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37

CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not

accept the changes, the applicant will be notified and informed of any required corrective action

in the next Office action. The objection to the drawings will not be held in abeyance.

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### Specification

5. The disclosure is objected to because of the following informalities: the summary of the invention is not provided. Appropriate correction is required.

6. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

## Arrangement of the Specification

- 7. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:
  - (a) TITLE OF THE INVENTION.
  - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
  - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
  - (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
  - (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A

    COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program
    listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables
    having more than 50 pages of text are permitted to be submitted on compact
    discs.) or

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REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (1) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

#### Claim Objections

8. Claims 2 and 5 are objected to because of the following informalities: claims 2 and 5 respectively recite "wherein said generating comprises using Zhang's methodology" and wherein said means generating employs using Zhang's methodology". One having ordinary skill in the art would generate a plurality of classification trees Zhang's methodology. Applicant is advised to amend the claims to read as "wherein said classification trees using Zhang's methodology".

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### Claim Rejections - 35 USC § 112

9. Claims 3 and 6 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 3 and 6, respectively recite, "wherein said searching comprises using Zhang's methodology" and "wherein said means for searching employs Zhang's methodology". It is unclear why one having ordinary skill in the art would use Zhang's methodology to search the consumer cluster. Zhang's methodology according to the invention is used to create the classification tree. If the Zhang's methodology can also use to search the consumer cluster, it must be detail in the specification. The specification does not show in anywhere that the Zhang's methodology can also use to search the consumer cluster. Applicant is advised to amend the specification or cancel the limitation from the claims. No new matter should be added.

### Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazarus et al., (hereinafter "Lazarus") US Patent no. 6,430,539 and Zhang, article entitled "Classification trees .....".

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As to claims 1 and 4, Lazarus discloses "behavioral data for a set of consumer, wherein consumer in each cluster of said plurality of cluster have substantially similar behavioral characteristics to each other and different behavioral characteristics from the consumers in all other clusters of said plurality of cluster" (see col.1, lines 35-47; col.3, lines 1-6 and lines 55-57; col.4, lines 12-42; col.5, lines 28-31; col.9, lines 55-67; col.10, lines 1-12), "demographic data for a set of consumer, wherein consumer in each cluster of said plurality of cluster have substantially similar demographic characteristics" (see col.1, lines 35-47; col.3, lines 1-6 and lines 55-57; col.4, lines 12-42; col.5, lines 28-31; col.9, lines 55-67; col.10, lines 1-12; col.12, lines 57-62). Lazarus provides a solution that defined cluster based jointly on behavior and demographics (col.39, liners 44-52; col.9, line 55-col.10, line 28; col.5, lines 26-65). Lazarus does not explicitly disclose the use of generating a plurality of classification tree base on demographics and behavior data. Zhang, on the other hand, discloses the use of creating a classification a plurality of classification tree base on demographics and behavior data (page 181, section 2.2; fig.3; fig.4; fig.5). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of the cited references. Such a combination would provide Applicant's admitted prior art the enhanced capability of increasing the accuracy of prediction.

As to claims 2 and 5, Zhang discloses the claimed "wherein said classification trees using Zhang's methodology" (page 181, section 2.2; fig.3; fig.4; fig.5).

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As to claim 3 and 6, Zhang discloses the claimed "wherein said searching using Zhang's methodology" (page 181, section 2.2; fig.3; fig.4; fig.5).

As to claim 7, Lazarus discloses the claimed "a profile definitions module for supplying 12. profile definitions to said partitioning module for use in creating classification trees" (see col.3, lines 1-6 and lines 55-57; col.4, lines 12-42; col.5, lines 28-31; col.9, lines 55-67; col.10, lines 1-12; col. 12, lines 57-62; col. 11, lines 48-66; col. 15, line 64-col. 16, lines 7); "a profile data module for supplying profile data to said partitioning module" (see col.1, lines 35-47; col.3, lines 1-6 and lines 55-57; col.4, lines 12-42; col.5, lines 28-31; col.9, lines 55-67; col.10, lines 1-12; col.12, lines 57-62; col.11, lines 48-66; col.15, line 64-col.16, lines 7); "a segment definitions module for supplying segment definitions data to said partitioning module" (see col.1, lines 35-47; col.3, lines 1-6 and lines 55-57; col.4, lines 12-42; col.5, lines 28-31; col.9, lines 55-67; col.10, lines 1-12, lines 24-28; col. 12, lines 57-62); and "a cluster assignments module for storing consumer clusters generated by said partitioning module, wherein said partitioning module generates an optimal classification tree resulting in a plurality of consumer clusters with consumers in each cluster of said plurality of clusters having substantially similar behavioral and demographic characteristics to each other and different behavioral or demographic characteristics from consumers in all other clusters of said plurality of clusters" (col.39, liners 44-52; col.9, line 55col. 10, line 28; col. 5, lines 26-65). However, Lazarus does not explicitly create classification trees to define consumer clusters. Zhang, on the other hand, discloses the use of creating a classification a plurality of classification tree base on demographics and behavior data (page 181, section 2.2; fig.3; fig.4; fig.5). It would have been obvious to one having ordinary skill in the art

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at the time the invention was made to combine the teachings of the cited references. Such a combination would provide Applicant's admitted prior art the enhanced capability of increasing the accuracy of prediction.

As to claim 8, Lazarus discloses the claimed "a summarization module adapted to generate summary data, said summary data being a summarization of data contained in said cluster assignments module" (see col.1, lines 35-47; col.3, lines 1-6 and lines 55-57; col.4, lines 12-42; col.5, lines 28-31; col.9, lines 55-67; col.10, lines 1-12, lines 24-28; col.12, lines 57-62); and a summary data module adapted to store said summary data" (see col.1, lines 35-47; col.3, lines 1-6 and lines 55-57; col.4, lines 12-42; col.5, lines 28-31; col.9, lines 55-67; col.10, lines 1-12, lines 24-28; col.12, lines 57-62).

As to claim 9, Lazarus discloses the claimed "wherein said profile definitions module comprises a database" (col.10, lines 24-27).

As to claim 10, Lazarus discloses the claimed "wherein said profile data module comprises an electronic file" (col.10, lines 22-24).

As to claim 11, Lazarus discloses the claimed "wherein said segment definitions module comprises a dbase file" (col.13, line 15-col.15, line 22).

As to claim 12, Lazarus discloses the claimed "wherein said cluster assignments module comprises a dbase table" (col.13, line 15-col.15, line 22).

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As to claim 13, Zhang discloses the claimed "wherein said partitioning module uses Zhang's methodology to create classification trees" (page 181, section 2.2; fig.3; fig.4; fig.5).

#### Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jean M Corrielus
Primary Examiner
Art Unit 2162

May 23, 2005